

Amendments to the Title:

Please replace the title with the following:

| IMAGE SIGNAL PROCESSING ~~DEVICE~~APPARATUS, IMAGE SIGNAL PROCESSING CIRCUIT,
IMAGE SIGNAL PROCESSING METHOD, PROGRAM, AND RECORDING MEDIUM

Amendments to the Specification:

Please add the following new paragraph after the Title and before the first paragraph on page 1:

THIS APPLICATION IS A U.S. NATIONAL PHASE APPLICATION OF PCT INTERNATIONAL APPLICATION PCT/JP03/05596.

Please replace the paragraph, beginning at page 6, line 11, with the following rewritten paragraph:

The 1st ~~invention~~aspect of the present invention is an image signal processing apparatus, comprising:

Please replace the paragraph, beginning at page 6, line 16, with the following rewritten paragraph:

color change detecting means of performing color change detection regarding the result of said image capture ~~while considering said pattern;~~

luminance change detecting means of performing luminance change detection regarding the result of said image capture; and

Please replace the paragraph, beginning at page 6, line 19, with the following rewritten paragraph:

luminance signal generating means of performing luminance signal generation regarding the result of said image capture based on the result of said color change detection and the result of said luminance change detection.

Please replace the paragraph, beginning at page 6, line 22, with the following rewritten paragraph:

The 2nd ~~invention~~aspect of the present invention is the image signal processing apparatus of the 1st ~~invention~~aspect of the present invention, wherein said color change detection is performed with respect to a predetermined direction corresponding to said pattern, and

Please replace the paragraph, beginning at page 7, line 2, with the following rewritten paragraph:

said luminance signal is generated such that a pseudo signal is suppressed at a color change point where said detected color change with respect to said predetermined direction exceeds a predetermined level regarding said luminance change.

Please replace the paragraph, beginning at page 7, line 6, with the following rewritten paragraph:

The 3rd ~~invention~~aspect of the present invention is the image signal processing apparatus of the 2nd ~~invention~~aspect of the present invention, wherein said pattern is a pattern having two pixels in the horizontal direction and four pixels in the vertical direction so as to arrange a color filter of magenta and a color filter of green in this order on a first line in the horizontal direction, a color filter of yellow and a color filter of cyan in this order on a second line in the horizontal direction, a color filter of green and a color filter of magenta in this order on a third line in the horizontal direction and a color filter of yellow and a color filter of cyan in this order on a fourth line in the horizontal direction, and

Please replace the paragraph, beginning at page 7, line 20, with the following rewritten paragraph:

The 4th ~~invention~~aspect of the present invention is the image signal processing apparatus of the 3rd ~~invention~~aspect of the present invention, wherein said color change detection is performed in accordance with a change as for said magenta in the horizontal direction and a change as for said green in the horizontal direction.

Please replace the paragraph, beginning at page 8, line 1, with the following rewritten paragraph:

The 5th ~~invention~~aspect of the present invention is the image signal processing apparatus of the 4th ~~invention~~aspect of the present invention, wherein said color change detection is performed further in accordance with a change as for said yellow in the vertical direction and a change as for said cyan in the vertical direction.

Please replace the paragraph, beginning at page 8, line 7, with the following rewritten paragraph:

The 6th ~~invention~~aspect of the present invention is the image signal processing apparatus of the 4th ~~invention~~aspect of the present invention, wherein said color change detection is performed further in accordance with a change as for said magenta in the vertical direction and a change as for said green in the vertical direction.

Please replace the paragraph, beginning at page 8, line 13, with the following rewritten paragraph:

The 7th ~~invention~~aspect of the present invention is the image signal processing apparatus of the 2nd ~~invention~~aspect of the present invention, wherein said pattern is a pattern having two pixels in the horizontal direction and two pixels in the vertical direction so as to arrange a color filter of red and a color filter of green in this order on a first line in the horizontal direction and a color filter of green and a color filter of blue in this order on a second line in the horizontal direction, and

Please replace the paragraph, beginning at page 8, line 23, with the following rewritten paragraph:

The 8th ~~invention~~aspect of the present invention is the image signal processing apparatus of the 7th ~~invention~~aspect of the present invention, wherein said color change detection is performed in accordance with a change as for said red in the direction of the diagonal line and a change as for said blue in the direction of the diagonal line.

Please replace the paragraph, beginning at page 9, line 4, with the following rewritten paragraph:

The 9th ~~invention~~aspect of the present invention is the image signal processing apparatus of the 7th ~~invention~~aspect of the present invention, wherein calculation for suppression of said pseudo signal is performed in accordance with a change as for said red in the direction of the diagonal line and a change as for said blue in the direction of the diagonal line.

Please replace the paragraph, beginning at page 9, line 10, with the following rewritten paragraph:

The 10th ~~invention~~aspect of the present invention is an image signal processing circuit, comprising:

Please replace the paragraph, beginning at page 9, line 12, with the following rewritten paragraph:

color change detecting means of performing color change detection regarding the result of image capture which is performed using a plurality of types of color filters which are arranged based on repetition of a pattern determined in advance, ~~while considering said pattern;~~

luminance change detecting means of performing luminance change detection regarding the result of said image capture; and

Please replace the paragraph, beginning at page 9, line 17, with the following rewritten paragraph:

luminance signal generating means of performing luminance signal generation regarding the result of said image capture based on the result of said color change detection and the result of said luminance change detection.

Please replace the paragraph, beginning at page 9, line 20, with the following rewritten paragraph:

The 11th ~~invention~~aspect of the present invention is an image signal processing method, comprising:

Please replace the paragraph, beginning at page 9, line 22, with the following rewritten paragraph:

a color change detecting step of performing color change detection regarding the result of image capture which is performed using a plurality of types of color filters which are arranged based on repetition of a pattern determined in advance, ~~while considering said pattern;~~

a luminance change detecting step of performing luminance change detection regarding the result of said image capture; and

Please replace the paragraph, beginning at page 10, line 2, with the following rewritten paragraph:

a luminance signal generating step of performing luminance signal generation regarding the result of said image capture based on the result of said color change detection and the result of said luminance change detection.

Please replace the paragraph, beginning at page 10, line 5, with the following rewritten paragraph:

The 12th ~~invention~~aspect of the present invention is a program which makes a computer execute the color change detecting step of performing color change detection regarding the result of image capture which is performed using a plurality of types of color filters which are arranged based on repetition of a pattern determined in advance, ~~while considering said pattern,~~ a luminance change detecting step of performing luminance change detection regarding the result of said image capture, and the luminance signal generating step of performing luminance signal generation regarding the result of said image capture based on the

result of said color change detection and the result of said luminance change detection, which are of the image signal processing method of the 11th ~~invention~~aspect of the present invention.

Please replace the paragraph, beginning at page 10, line 16, with the following rewritten paragraph:

The 13th ~~invention~~aspect of the present invention is a recording medium which holds the program of the 12th ~~invention~~aspect of the present invention and which can be processed on a computer.

Please replace the paragraph, beginning at page 18, line 12, with the following rewritten paragraph:

An output of the multiplier 18 is subtracted from an output of the adder 16 by the subtractor 17, and the difference is delayed by the 1-pixel delaying part 24 and inputted to the core processing part 20.

Please replace the paragraph, beginning at page 19, line 13, with the following rewritten paragraph:

An output from the core processing part 20 is added by the adder 19 to an output from the multiplier 18 delayed by the 1-pixel delaying part 23, and the sum is outputted to the luminance signal output terminal 22.

Please replace the paragraph, beginning at page 22, line 22, with the following rewritten paragraph:

(Formula 3)

$$th = \text{MAX} \text{Max} (a, 0)$$

$$\begin{aligned} a = & \text{Max} (|Mg(m, n) - Mg(m + 2, n)|, \\ & |Mg(m - 1, n + 2) - Mg(m + 1, n + 2)|) \\ & + \text{Max} (|Gr(m - 1, n) - Gr(m + 1, n)|, \\ & |Gr(m, n + 2) - Gr(m + 2, n + 2)|) \\ & - b \times (|2 \times Ye(m, n + 1) - Ye(m, n - 1) - Ye(m, n + 3)| \\ & + |2 \times Cy(m + 1, n + 1) - Cy(m + 1, n - 1) - Cy(m + 1, n + 3)|) \end{aligned}$$

Please replace the paragraph, beginning at page 25, line 18, with the following rewritten paragraph:

(Formula 7)

$$th = \text{MAX} \text{Max} (a, 0)$$

$$a = \text{Max} (|Mg (m, n) - Mg (m + 2, n)|, \\ |Mg (m - 1, n + 2) - Mg (m + 1, n + 2) |) \\ + \text{Max} (|Gr (m - 1, n) - Gr (m + 1, n)|, \\ |Gr (m, n + 2) - Gr (m + 2, n + 2)|) \\ - b \times (|2 \times Ye (m, n + 1) - Ye (m, n - 1) \\ - Ye (m, n + 3)| + |2 \times Cy (m + 1, n + 1) \\ - Cy (m + 1, n - 1) - Cy (m + 1, n + 3)|)$$

Please delete the line, beginning at page 36, line 24, in it entirety:

~~POSSIBILITY OF INDUSTRIAL USE~~